

REMARKS

The following remarks are submitted to address the above amendments and issues raised in the Official Action mailed September 9, 2003.

Following entry of the amendments above, claims 1-2, and 4-29 are pending in this application.

Claims 1-29 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention.

Claims 1 and 4-14 stand rejected under 35 U.S.C. § 112, first paragraph, as being non-enabling.

These amendments are made merely to clarify the subject matter of this application. No new matter has been added. Support for requested amendments can be found in the original claims and throughout the present specification and drawings. Applicant respectfully requests consideration of the application in light of the above amendments and the following remarks.

Claims 1-29 — 35 U.S.C. § 112, Second Paragraph

The rejections of claims 1-29 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention are respectfully traversed.

Claims 1, 15, 17, and 28, as amended, claim “. . . *multiplying or dividing* the first resonant frequency by a factor of a power of two to provide a *second* resonant frequency in another electromagnetic frequency range” (Emphasis added.)

The Official Action states that in claim 1, lines 10-12 (and similarly in claims 15, 17, and 28), a first resonant frequency is determined by a calculation regarding velocity and wavelength, and that, in lines 13-14, a shifting of frequency to a group of undefined resonant frequencies in another electromagnetic frequency range is performed. The Official Action states that there is a lack of antecedent basis for such other resonant frequencies, and requests clarification of the “shifting” practice. (Official Action, page 2.)

Applicant respectfully submits that proper antecedent basis is provided in claims 1, 15, 17, and 28, as amended, for a (second) resonant frequency to which the first resonant frequency relates, and that the step of “shifting” the first resonant frequency to the second resonant frequency is clarified by replacing “shifting” with “multiplying or dividing”. Accordingly, Applicant respectfully submits that claims 1, 15, 17, and 28 particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. Claim 3 has been canceled. Claims 2, 4-14, 16, 18-27, and 29 depend from claims 1, 15, 17, and 28, and as such, particularly point out and distinctly claim the subject matter which the Applicant regards as the invention.

For all of these reasons, the Office is respectfully requested to withdraw the rejections of claims 1-2 and 4-29 under 35 U.S.C. § 112, second paragraph.

Claims 1 and 4-14— 35 U.S.C. § 112, First Paragraph

The rejections of claims 1 and 4-14 under 35 U.S.C. § 112, first paragraph, as being non-enabling are respectfully traversed.

Claim 1, as amended, claims “. . . determining a wavelength of the genomic material, the genomic material comprising a plurality of base pairs spaced apart by an average spacing, the average spacing comprising a known value, by determining the number of base pairs in the genomic material and multiplying the number of base pairs by the known value for the average spacing between base pairs”

The Official Action states that the specification does not reasonably enable the determination of genomic material wavelength as set forth in claim 1, line 9. (Official Action, pages 2-3.)

As pointed out in the Official Action, the specification is enabling for the determination of genomic material wavelength via the practice set forth in claim 15, lines 9-14. (Official Action, pages 2-3.) Claim 1 has been amended to include the practice for the determination of genomic material wavelength as set forth in claim 15, lines 9-14. Accordingly, Applicant respectfully submits that the specification provides enablement for the determination of genomic material wavelength via the practice set forth in claim 1, as amended, such that any person

skilled in the art would be enabled to make/use the invention commensurate with the scope of claim 1. Claims 4-14 depend from claim 1, and are thus likewise enabled by the specification.

For all of these reasons, the Office is respectfully requested to withdraw the rejections of claims 1 and 4-14 under 35 U.S.C. § 112, first paragraph.

Other Amendments

Other amendments to claims are made to provide clarity by making those claims consistent with amended claims 1, 15, 17, and 28.

CONCLUSION

Applicant submits that a full and complete response has been made herein to the Official Action and, as such, all pending claims in this application are now in condition for allowance. Therefore, Applicant respectfully requests early consideration of the present application, entry of all amendments herein requested, withdrawal of all rejections, and allowance of all pending claims.

The Office is respectfully invited to contact J. Michael Boggs at (336) 747-7536, to discuss any matter relating to this application.

Respectfully submitted,

Date

J. Michael Boggs
Reg. No. 46,563

Kilpatrick Stockton LLP
1001 West Fourth Street
Winston-Salem, NC 27101
(336) 747-7536
(336) 734-2632 (facsimile)